# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Digital Audio Broadcasting Systems	)	MM Docket No. 99-325
And Their Impact on the Terrestrial	)	
Radio Broadcast Service	)	

#### COMMENTS OF MICROSOFT CORPORATION

#### I. INTRODUCTION

Digital radio broadcasting ("DRB")<sup>1</sup> enables the delivery of new and exciting services to consumers. The rules adopted in the recent *Second Report & Order* clarify the transition of radio broadcasters to digital service and will drive long overdue progress. The *Second Further Notice of Proposed Rulemaking* adopted with the *Second Report & Order* raises questions about what if any additional regulation should be imposed on alternative DRB services.<sup>2</sup> Microsoft Corporation ("Microsoft") believes that it is important for the Commission to strike the appropriate balance with respect to its statutory obligation to enable digital MPS

<sup>&</sup>lt;sup>1</sup> In these comments, the term "Digital Radio Broadcasting" and "Digital Radio Services" refer broadly to the audio and non-audio, digital services broadcast by terrestrial radio stations (including multicasts, datacasting, and text services), all of which are supported by the In-Band On-Channel ("IBOC") technology. "Digital Audio Broadcasting" refers specifically and exclusively to audio services." "IBOC Main Progam Service" (MPS) denotes the primary digital audio programming channel. "Alternative DRB" services includes all digital radio services except for MPS.

<sup>&</sup>lt;sup>2</sup> Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service, Second Report and Order, First Order on Reconsideration, and Second Further Notice of Proposed Rulemaking, Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service, MM Docket No. 99-325, FCC 07-33 (rel. May 31, 2007) ("Second Report and Order").

audio and simultaneously allow new, innovative alternative DRB services to flourish. Premature regulation will quash the innovation and growth that is just beginning to emerge in the digital radio broadcasting industry. In order to realize the spectrum's full innovative potential, the Commission should adopt a deregulatory approach and flexible rules that maximize the accommodation of alternative DRB services, including datacasting services.

Microsoft currently provides subscription datacasting services using analog FM subcarriers of a number of broadcasters across the U.S. and is transitioning these services into the DRB environment. Therefore, Microsoft is acutely aware of the nascent nature and existing uncertainty around the business models, market demands, and consumer interests with respect to these new and evolving services. If these services are to reach their full potential and deliver the greatest benefit, policy makers should not precipitously impose regulations on these new services that would stifle their development at this very early stage in their evolution. We anticipate that proactive investment by Microsoft and others in these new services as early market entrants ultimately will stimulate their broader adoption, and thereby assist in providing the significant future consumer benefits the Commission envisions for DRB. The institution of new regulatory constraints could adversely impact investments in such services and thereby deprive consumers of new and interesting services. Furthermore, these new services in many instances may be markedly different offerings than existing analog radio services, making old rules largely inappropriate for the new services.

## II. ROBUST USE OF THE RADIO BROADCASTING FREQUENCIES BENEFITS CONSUMERS AND THE RADIO AND CONSUMER ELECTRONICS /INFORMATION TECHNOLOGY INDUSTRIES.

#### A. DRB Will Deliver an Enhanced Consumer Experience.

DRB provides listeners with increased service offerings and an improved terrestrial DAB experience.<sup>3</sup> The fungibility of the DRB payload also allows broadcasters and third parties to deliver meaningful data, like background information about current audio programming, local weather and traffic updates, and market and financial data. Furthermore, the flexibility to pursue subscription datacasting or advertising DRB services will provide broadcasters with a sound financial base and drive greater competition in the digital radio industry.

### B. MSN Direct Currently Uses the FM Subcarrier Bands and Will Use DRB Technology to Deliver Datacasting Services to Consumers.

DRB has the potential to enable many new and innovative services such as MSN Direct. MSN Direct is a specialized wireless information service that is part of Microsoft's Smart Personal Objects Technology (SPOT) initiative. The SPOT Group has partnered with numerous consumer electronic and device manufacturers to make everyday items more useful through technology. For example, with MSN Direct's navigation service, in-car navigation devices receive traffic and weather alerts, fuel prices for nearby gas stations, and local movie theater schedules. Individuals sporting a Smart Watch can choose from a variety of content, including the latest in news, weather, and sports, market and traffic information, and personal appointment data transmitted to their wristwatch using FM radio spectrum.

<sup>&</sup>lt;sup>3</sup> See id. ¶¶ 4, 18, 19.

<sup>&</sup>lt;sup>4</sup> More information on MSN Direct is available at http://www.msndirect.com/.

The MSN Direct service currently is provided through an analog subcarrier distribution system. Microsoft helped design the radio system and collaborated with several broadcasters to enable the network. Through these efforts, MSN Direct is delivered by two hundred and fifty stations in the United States and Canada and reaches 70 percent of the U.S. population. Microsoft and Clear Channel Radio recently partnered to provide service, MSN Direct HD, via nationwide data delivery using DRB technology. As with MSN Direct service, MSN Direct HD customers will receive personalized data through a variety of consumer products such as portable navigation devices and home appliances.

## C. The Transition to Digital Operations Will Provide Significantly Increased Bandwidth Capacity and Has the Potential for Innovative New Offerings.

In its Second Report and Order, the Commission took a giant leap forward in ensuring that radio stations successfully implement DRB by authorizing all FM stations to operate in the Extended Hybrid IBOC mode.<sup>5</sup> The Extended Hybrid mode enables broadcasters to provide increased digital throughput to all digital radio receivers while simultaneously delivering analog service to all analog receivers. With this increased digital capacity, broadcasters can deliver new services to the public beyond traditional audio programming. For example, weather information can be enhanced with richer image maps and improved radar data. Detailed street maps can notify users of community events, and consumers can interact with and personalize their DAB programming.

Moreover, DRB (particularly with the increased capacity enabled by the Extended Hybrid mode) has the potential to shift the business model from a fixed lease to a dynamic use model. In the analog subcarrier distribution system, third parties currently lease capacity from

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<sup>&</sup>lt;sup>5</sup> Second Report and Order, ¶¶ 18–19.

broadcasters through fixed lease agreements. Although this system works for industrial users, it lacks the flexibility needed by smaller parties or businesses experimenting with new services. In contrast, DRB is more amenable to a dynamic use model because many data services may be multiplexed within the fixed or opportunistic data allocations that broadcasters choose to establish in their DRB service configurations, thereby allowing a more "on-demand" environment than in today's more static analog subcarrier environment.

# III. A LIGHT REGULATORY TOUCH IS NECESSARY TO SUSTAIN A MEANINGFUL MPS OFFERING AND AN UNREGULATED APPROACH WILL LEAD TO INNOVATIVE ALTERNATIVE DRB SERVICES.

Alternative DRB services such as datacasting are still evolving, and the Commission should not prejudge how they will develop. No one knows which business model or service offering consumers will find compelling. In past proceedings, the Commission has recognized that the best way to ensure that broadcasters continue to offer over-the-air services is to adopt rules that "maximize broadcasters' flexibility to provide a digital service to meet the audience's needs and desires." Yet, in the *Second Further Notice of Proposed Rulemaking*, the Commission proposed placing significant limitations on subscription services, 7 which include datacasting. This framework will stifle creativity in deciding how to best offer datacasting and other alternative DRB services to the public. Non-subscription services are rarely free; rather, they typically are supported by advertising. The subscription option provides a commercial-free alternative that some consumers prefer. Therefore, an approach that accommodates a variety of

<sup>&</sup>lt;sup>6</sup> Fifth Report and Order, *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*. Fifth Report and Order, MM Docket No. 87-268, 12 FCC Rcd. 12809, ¶ 2 (1997).

 $<sup>^7</sup>$  Second Report and Order,  $\P\P$  113–116.

<sup>&</sup>lt;sup>8</sup> *Id.* ¶¶ 48–49.

business models, like pay-per-item, advertising, and all-you-can-eat, would maximize the potential of DRB.

### A. The Commission's Existing Requirement That Licensees Provide an Overthe-Air MPS Stream Is Sufficient to Preserve Digital Radio.

The best way for the Commission to ensure that licensees will continue to provide a free over-the-air MPS offering is for the Commission to maintain its existing light regulatory touch for MPS offerings and refrain from regulating subscription datacasting services and other alternative DRB services. For example in crafting the DTV rules, the Commission chose "to impose few restrictions on broadcasters and to allow them to make decisions that will further their ability to respond to the marketplace." Instead of mandating what or how many ancillary or supplementary services broadcasters could provide, the Commission adopted rules encouraging broadcasters to offer any type of ancillary or supplemental services so long as it did not prevent the broadcaster from providing at least one free over-the-air stream of its primary broadcast service. <sup>10</sup>

The Commission should apply this deregulatory framework to alternative DRB services. Much like the DTV rules, the DRB rules require that participating broadcast radio stations transmit a free over-the-air MPS stream that is "at least comparable in sound quality to the analog programming service currently provided to listeners." Regrettably, in its *Second Further Notice of Proposed Rulemaking*, the Commission suggests diverging from the wise path it took in the DTV proceeding by seeking comment on whether the Commission should

<sup>&</sup>lt;sup>9</sup> Fifth Report and Order, Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, Fifth Report and Order, MM Docket No. 87-268, 12 FCC Rcd. 12809, ¶ 7 (1997).

<sup>&</sup>lt;sup>10</sup> See 47 C.F.R. §§ 73.624(b)–(c).

Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service, 72 Fed. Reg. 45,670, 45,692 (Aug. 15, 2007) (to be codified at 47 C.F.R. § 73.403(a)).

implement a requirement that no more than 20 to 25 percent of a station's digital capacity be devoted to subscription services.<sup>12</sup>

Such a percentage approach is inappropriate because broadcasters need flexibility in order to compete in the radio market and to provide quality programming to the public. By severely limiting broadcasters' ability to provide subscription services, the Commission would substantially reduce a revenue stream that is needed to recoup the costs of the digital conversion and to invest in improved programming. Without these resources, it will be more challenging for terrestrial radio to compete against ever increasing competition, much of which offers not only high quality digital music, but also the data services that the public has come to expect. The unimpeded provision of subscription or advertising datacasting and other alternative DRB supported services is therefore the best way to ensure that free, over-the-air MPS service survives, and thrives, well into the future.

Furthermore, a percentage approach appears arbitrary. There is no evidence that broadcasters will stop providing a free over-the-air MPS offering without a cap on subscription services, and, indeed, the Commission's regulations prohibit broadcasters from doing so. <sup>13</sup>

There is also no good justification for such a severe cap on the offering of subscription services.

The Commission based the 20 to 25 percent estimate "on current analog FM SCA usage and the scalability of the digital stream in 1 kbps or smaller increments." However, because DRB technology increases bandwidth capacity, taking guidance from current analog FM SCA usage is inappropriate. Furthermore, without knowing exactly what types of services will be provided,

<sup>&</sup>lt;sup>12</sup> Second Report and Order, ¶ 113.

<sup>&</sup>lt;sup>13</sup> See Digital Audio Broadcasting Systems, 72 Fed. Reg. at 45,692.

 $<sup>^{14}</sup>$  Second Report and Order, ¶ 113.

the Commission cannot accurately predict how much bandwidth will be dedicated to each subscription service.

## B. The Commission Should Not Impose a Panoply of Broadcast Rules on Datacasting or Other Alternative DRB Services.

In the Second Further Notice of Proposed Rulemaking, the Commission sought comment on whether public interest obligations, including station identification, radio reading service, and emergency alert system rules, should apply to subscription services, <sup>15</sup> which includes subscription datacasting. <sup>16</sup> Subscription datacasting services, such as the MSN Direct service, are not traditional audio services, and the public interest obligations (station identification, and emergency alert system rules) are not appropriate for these new offerings. For example, a station identification requirement makes sense in the context of MPS, but would not make sense for data streams sent to a wearable device. Therefore, the Commission should act with care before simply extending that requirement to subscription datacasting or any other alternative DRB services.

More fundamentally, however, Microsoft believes the underlying justifications for these rules are absent with respect to many subscription datacasting services. For example, while station identification informs the listener of the source of the content aired and allows the listener to identify purported violators in a complaint to the Commission, these concerns are absent where the consumer is subscribing to a third party service, like MSN Direct. With many subscription datacasting services, the customer knows who the source of the content is because she has signed up with the service provider directly. Finally, in many cases, application of

<sup>&</sup>lt;sup>15</sup> See id. ¶ 115.

<sup>&</sup>lt;sup>16</sup> See id. ¶ 49.

existing radio rules would be disruptive and damaging to the growth of DRB. To name just one example, it is unclear how the political broadcasting rules could possibly apply to paging services or point-to-point messages. This uncertainty could discourage broadcasters from providing these types of services.

The Commission also sought comment on whether it has the authority to impose fees on broadcasters' provision of subscription services. The Commission does not have inherent authority to impose fees, and Congress has not authorized the Commission to impose fees on DRB, as it did in the DTV context. Moreover, Congress granted the Commission authority to collect fees in the DTV context primarily because broadcasters received spectrum in the transition that otherwise could have been auctioned. This justification is lacking in the DRB context because broadcasters do not obtain new spectrum under IBOC DRB. Therefore, Congress' grant of jurisdiction to the Commission in the DTV context does not automatically apply to DRB. Nevertheless, should the Commission decide to impose any fees, they should be no greater than those levied in the DTV context and should at a minimum reflect the limits highlighted by Congress in the DTV setting.

<sup>&</sup>lt;sup>17</sup> *Id.* ¶ 114.

<sup>&</sup>lt;sup>18</sup> Id.

<sup>&</sup>lt;sup>19</sup> See H.R. REP. No. 104-204(I), at 117 (1995), reprinted in 1996 U.S.C.C.A.N. 10, 85 ("The Committee intends that the Commission establish fees which are, to the maximum extent feasible, equal to but do not exceed (over the term of the license) the amount the public would have received had the spectrum for such services been auctioned publicly under section 309(j) of the Communications Act, and which avoid unjust enrichment of the licensee for such use of the spectrum.").

CONCLUSION

In recent years, competition in the radio market has dramatically intensified.

Satellite radio, online and wireless music services, the resurgence of portable music devices, and

podcasting all contend with traditional broadcast radio for an audience. In order for terrestrial

radio broadcasters to be able to continue to compete in this space, the Commission's rules must

strengthen, not impede, the promise for DRB's success. To this end, Microsoft urges the

Commission to take a deregulatory approach for MPS offerings and an unregulated approach for

subscription datacasting services and other alternative DRB services. Such an approach will

strike the proper balance between the Commission's goal of fostering a vibrant and innovative

terrestrial digital audio service, radio broadcasters' need for the successful implementation of

DRB, and the public's desire for improved programming and increased services.

Respectfully submitted,

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